

CORK SMUT

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Corn smut, caused by the fungus *Ustilago maydis* (DC.) Cda., is one of the most widely distributed corn diseases and occurs wherever corn is grown in the United States (2,4). Although found on field corn, it is more destructive to sweet corn (5). The average annual loss is 3 to 5 percent, but individual fields of corn may be totally destroyed.

The fungus *Ustilago maydis* was first described in Europe in 1754 but not found to occur here until 1822 (5).

SYMPTOMS. "Any above-ground part of the corn plant may be attacked: stalks, prop roots, leaves, tassels, husks and ears (5) (Fig. 1). Large boils are at first covered with a greenish white membrane which later breaks and releases myriads of dark spores (chlamydospores) (1,5). Infected plant parts are often distorted. Infections are not systemic and may develop wherever a spore lands. The fungus is not seedborne. Young seedlings are susceptible and are most often attacked at a stage of development of 1 to 3 ft tall (5).

Corn smut thrives in warm weather. The optimum temperature for spore germination is 80 to 92 F. Infection is likely to be more severe when scant rainfall occurs during the early stages of plant growth, followed by moderate rainfall as the corn approaches maturity (5).

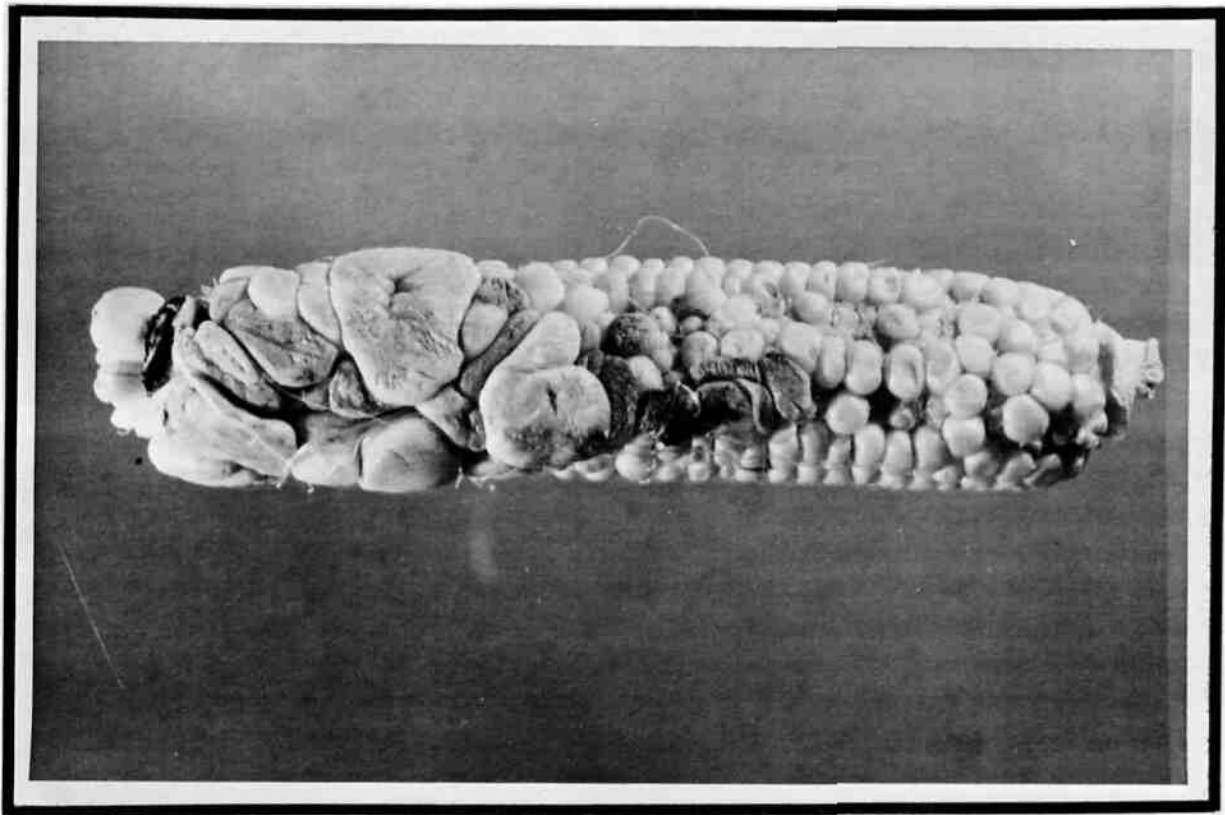


Fig. 1. Corn smut, *Ustilago maydis* (DC.) Cda. on ear of sweet corn, *Zea mays* L.

CONTROL. There are no satisfactory control measures for corn smut (3); however, some hybrid varieties are reported resistant (5). Infected plant material should be destroyed and should not be eaten by livestock.

Literature Cited

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